OPTIMA ZigBee Thermostat

Quick Start Guide

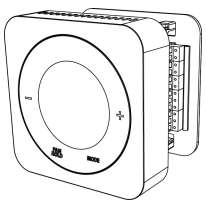
Salus Controls Inc.
123 Townsend St. Level LL2
San Francisco, CA 94107

Version 1.0

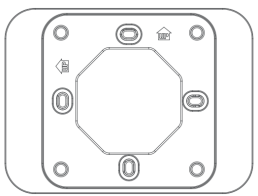
For other language versions, please visit: **www.salusinc.com**

LET'S GET STARTED.

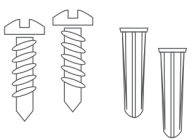
Make sure you have the following items:



Thermostat with Mounting Plate



Trim plate

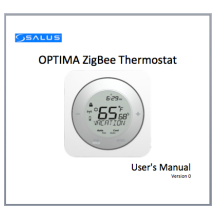


Screws and Anchors

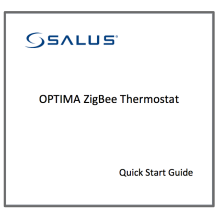
Heat Pump HP (Wiring label)		Gas or Electric Non-HP (Wiring label)	
R	R	RC	RC
C	C	RH	RH
L	L	C	C
Y1	Y1	Y1	Y1
Y2	Y2	Y2	Y2
W1	W1	W1	W1
O/B	O/B	W2	W2
G	G	G	G

Wire Labels

2 x AA alkaline batteries



User's Manual



Quick Start Guide

FCC and Industry Canada

RF Radiation Exposure statement: This equipment complies with FCC and Industry Canada RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the antenna and all persons.

Industry Canada

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC Statements

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

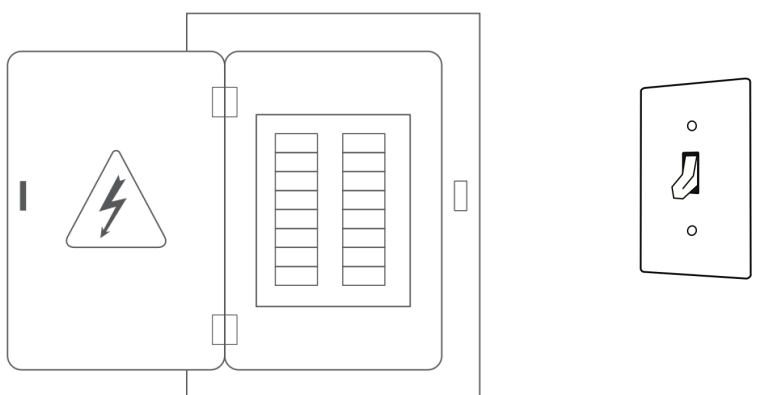
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Turn off the heating and/or cooling

Turn OFF the breakers or remove the fuses to the heating and/or cooling systems at the electrical panel.

In some regions, there may be a switch located near the furnace.



Determine wiring configuration

- Remove the old thermostat to expose the wiring terminals.
- Take a picture of the wiring for future reference.
- Note the terminals attached to each wire and attach the matching label to the ends of the wires. Use the following table as a reference.

Heat Pump HP (Wiring label)		Gas or Electric Non-HP (Wiring label)	
R	R	RC	RC
C	C	RH	RH
L	L	C	C
Y1	Y1	Y1	Y1
Y2	Y2	Y2	Y2
W1	W1	W1	W1
O/B	O/B	W2	W2
G	G	G	G

* A jumper connects RC and RH as most combination heat and cooling systems use a single transformer. For systems where separate transformers are used, remove the jumper in place across the RC and RH terminals.

Optima Thermostat Wiring Reference			
Gas, Electric, or Oil (non-HP)		**Heat Pump (HP)**	
R or RC*	24 VAC for Cooling system	R or RC*	24 VAC for Cooling system
RH*	24 VAC for Heating system	RH*	24 VAC for Heating system
C	24 VAC common return	C	24 VAC common return
--	Reserved	L	System monitor
Y or Y1	Single / 1st stage cooling	Y or Y1	Single / 1st stage compressor
Y2	2nd stage cooling	Y2	2nd stage compressor
W or W1	Single / 1st stage heating	W or W1	Emergency heat
W2	2nd stage heating	O/B	Changeover valve
G	Fan signal	G	Fan signal
--	Reserved	--	Reserved

duration of implied warranties of merchantability or fitness, so these exclusions or limitations may not apply to you.

No oral or written information or advice given by Salus or a Salus-authorized representative shall modify or extend this warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.

Customer's sole and exclusive remedy under this limited warranty is product repair or replacement as provided herein. If a Product under warranty is defective, the Customer may:

- contact the party ("Seller") from which the Customer purchased the Product to obtain an equivalent replacement product after the Seller has determined that the Product is defective and the Customer is eligible for a replacement, or,
- contact Salus Service at 4700 Duke Drive, Suite 200, Mason, OH 45040, to determine whether the device qualifies for a replacement. If a replacement is warranted and is shipped prior to the return of the device under warranty, a credit card is required and a hold may be placed on the Customer's credit card for the value of the replacement until the returned device is verified as eligible for replacement, in which case, the Customer's credit card will not be charged.

This warranty gives you specific legal rights, and you may also have other rights that vary from jurisdiction to jurisdiction. If you have any questions regarding this warranty, please write Salus at:

123 Townsend St. Level LL2
San Francisco, CA 94107

SALUS WARRANTY

Salus Controls Inc. (“Salus”) warrants that for a period of two (2) years (“Warranty Period”) from the date of purchase by the consumer (“Customer”), this device, excluding batteries (“Product”), shall be free of defects in materials and workmanship under normal use and service in accordance with all supplied instructions. During the warranty period, Salus shall, at its option, repair or replace any defective Products, at no charge for the device. Any replacement and/or repaired devices are warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer.

This warranty does not cover removal or reinstallation costs. This warranty does not apply to any Product (i) which has been modified, repaired, or altered, except by Salus or an authorized Salus representative, (ii) which has not been maintained in accordance with any handling or operating instructions supplied by Salus, or (iii) which has been subjected to unusual physical or electrical stress, misuses, abuse, negligence or accidents.

This warranty is the only express warranty Salus makes for the Product. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, are limited to the Warranty Period or the shortest period allowed by law.

SALUS SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, or limitation on the

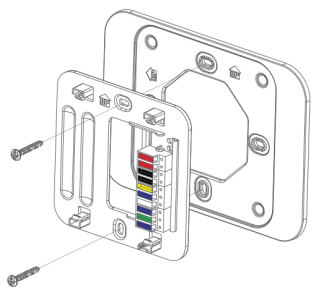
Remove old thermostat terminals

Remove the old thermostat wiring terminals from the wall, taking care not to allow the wiring to fall inside the wall.

TIP: Wrap the wire ends around a long stick, such as a pencil to keep the wires from falling into the wall.

Install Mounting Plate

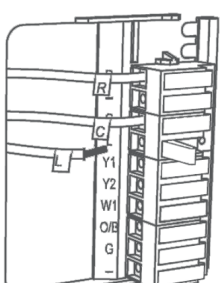
Remove the Mounting Plate from the back of the Optima thermostat. Use the included wall anchors and screws to attach the Mounting Plate to the wall, making sure the wires run through the center opening. Use the Trim Plate vertically or horizontally if desired.



Attach Wiring

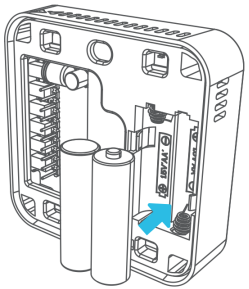
Before attaching the wires, match the wire (using the labels) to its corresponding terminal. Refer to the picture of the wiring taken earlier if necessary.

- Open the terminal by lifting the latch up.
- Push each wire into the hole of the terminal and push the latch down to secure the wire.



Install Batteries

Insert the alkaline batteries into the back of the thermostat. **Make sure the polarity of the batteries is correct.** After inserting the batteries, the display will flash all the segments, followed by the version number of the firmware, then display US / CA with a blinking US.



Initial Configuration

When configuring the thermostat, press the + or – button or use the slider ring to cause the desired value to blink, then press MODE to select the value.

Using the table at right, select the country, then the type of system.

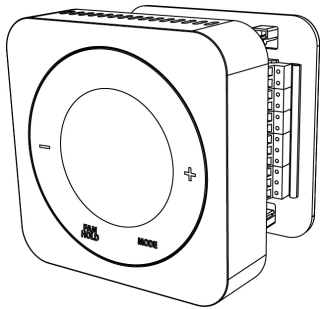
After this configuration, the thermostat will display the Home Screen, and be ready for attachment to the Mounting Plate.

Value	Description
US	United States – Configures thermostat for use in the US.
CA	Canada – Configures thermostat for use in Canada
HP	Heat Pump
NON-HP	Non Heat Pump – Gas, electric, or oil heat
O	Heat Pump with O reverse valve
B	Heat Pump with B reverse valve
FAN HE	Non-HP: Electric or Oil Heat
FAN HG	Non-HP: Gas Heat

Attach Thermostat To Mounting Plate

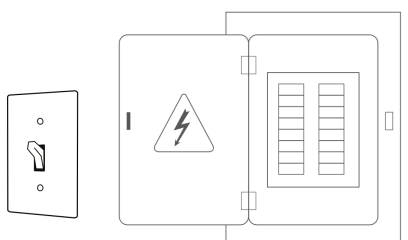
Attach the thermostat to the Mounting Plate by aligning the connector pins and the plastic retention posts and pushing the thermostat onto the Mounting Plate.

Make sure the connector pins are not bent and that the **thermostat is fully seated** on the Mounting Plate.



Turn Power Back On To The HVAC System

Go to the electrical service panel or furnace switch and turn the HVAC system back on.



Configure Thermostat

The thermostat can now be used as a basic local thermostat. To enable the enhanced features, additional settings need to be configured, such as pairing with a connected home system. See the *Configuring the Thermostat* section in the **User's Manual** for more details.